# Hild Rygnestad

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## Profile

My main work experience is in financial and economic modelling. I have improved on existing and designed new complex financial models for mining, energy, emerging industry projects, and agricultural and rural development. The goal is always to support management decisions. My work has also included statistical analyses and risk analyses using Monte Carlo simulation modelling. I have supported small consulting firms with periodic financial reporting. In addition, I have conducted portfolio reviews of development projects and programs identifying elements of good practice and overall trends.

## Expertise

### Financial, Economic and Statistical Analysis

Designed complex financial models for mining, energy, and development projects to support management decisions and negotiations with financial institutions and investors. Models include detailed calculations for production revenue, capital costs, operating cost, book- and tax-depreciation, working capital, and financing as required. The models include life-of-project income statements, balance sheets and cash flow statements along with financial indicators such as Net Present Value, Benefit Cost Ratio, Internal Rate of Return and Payback Period. Models also include extensive sensitivity analyses and, in some cases, quantitative and qualitative risk analyses.

Performed risk analyses for mines under private sector development with an emphasis on estimating the necessary level of contingency for total capital costs with the use of Monte Carlo simulation modelling. Incorporated Monte Carlo simulation in discounted cash flow models for internationally funded development projects that target agricultural productivity and natural resource management. Statistical analyses for private sector projects have included analyses of variance for agricultural field trials incorporating genotype and location interactions.

Built a suite of user-friendly analytical tools for: decomposing growth rates by factor inputs; calculating rate of return to capital; decomposing output growth by main components of aggregate demand; decomposing output and employment growth by sectors; decomposing contributions of productivity growth, employment growth, and labor force growth. The materials include tools in Excel format, documentation, step-by-step guides, examples, and video-tutorials.

Developed corporate financial models for emerging industry companies tracking key financial and sector indicators through income statements, cash flow statements, and balance sheets. In support of management decisions and for investor presentations, these analyses included detailed modelling of production revenue, operating cost, capital costs, financing, taxation, book- and tax-depreciation, equity interests, acquisitions, and biological assets and inventory valuation. Participated in designing and collating budgets across multiple departments and locations for forecasting.

### Project Controls

Supported small consulting firms with invoicing, day-to-day bookkeeping, periodic reporting, and liaised with certified accountants to prepare information for income and value added tax filings. For clients' projects, developed and implemented project controls procedures that incorporate tracking budgets, actual spending, invoice auditing, contract management, commitments, and trends. Designed management reporting formats and trained and supported staff to implement the procedures.

### Portfolio Reviews

Conducted portfolio reviews for a major international organization of projects and programs to identify elements of good practice and overall trends. Reviewed topics include: sustainable agriculture systems, knowledge & institutions, agricultural producer organizations, agribusiness, biotechnology & biosafety, agricultural education, agricultural innovation systems, land administration, and gender issues. The reviews included searching internal project databases, reviewing strategy papers, and project documents. Interviews were also conducted with key project staff.

**Teaching/Training**

Developed case studies and demonstrated risk analysis software for use in agriculture and rural development projects. This includes creating online modules focusing on risk analysis. Developed and delivered lectures to undergraduate and graduate university students in agricultural policy, resource economics, and valuation. I supplemented lectures with visual aids and practical classes to develop the student's analytical, modelling and presentation skills. Work included setting and marking exam questions and managing an on-line training course.

## Key Skills

- Highly motivated, self-starter.
- Analytical, detail oriented and methodical.
- Strong organization and time management skills
- Excellent interpersonal skills including extensive experience in long-distance team communication using WebEx, Skype, Teams, and similar tools.

- Advanced user of Microsoft Office including: Excel, Word, Access, and PowerPoint.
- Advanced user of: Sage 50, Adobe Captivate, Visual Basic, HTML, PHP, MySQL, R-Excel.
- Fluent in spoken and written English and Norwegian (native).

## Experience

**ROHIKR LLC, Burnham-on-Sea, UK**
**Owner**                                                                 Jul 2023 - present
Providing technical and financial management support to start-up and small companies in the primary production sectors of agriculture and mining. (www.rohikr.com).

**Rygnestad UK, Burnham-on-Sea, UK**
**Owner**                                                                 Sep 2024 – present
Providing financial and economic analyses for improved decision-making. (www.rygnestad.net).

**Rygnestad Canada, Ottawa, Canada**
**Managing Director**                                                     Jan 2006 – Sep 2024
Providing financial and economic analyses for improved decision-making. (www.rygnestad.net).

**Plasco Energy Group, Ottawa, Canada**
**Business Analyst**                                                      Jul 2009 – Nov 2009
Designed and maintained financial models for corporate and business development analyses.

**the Rygnestad Group LLC, Colorado/Florida, USA**
**Consultant, Economist**                                                 Mar 2002 – Jun 2009
Provided business solutions in financial and economic analyses. Provided project management support and audits. Designed analytical and management tools for clients. (www.rygnestad.net)

**Strategic World Initiative for Technology Transfer (*swiftt*), Cornell University, Ithaca, New York**
**Program Associate**                                                     Jun 2001 – Dec 2001
Developed, designed and maintained web-based course in intellectual property with a team of internal and external contributors. Developed customizable tool for contract management aimed at businesses and research centers worldwide.

**Department of Food and Resource Economics (IFRO), Copenhagen, Denmark**
*(previously Danish Institute of Agricultural and Fisheries Economics, SJFI)*
**Researcher**                                                            Sep 1998 – Mar 2001
Conducted research in agricultural economics, and more specifically analyses regarding environmental economics and policy. Several projects included multidisciplinary work with other institutes.

## Education

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| University of Western Australia, Perth, Australia | Doctor of Philosophy (agricultural economics) | Apr 1999 |
| | Postgraduate Diploma in Science in Agriculture | Apr 1995 |
| Norwegian University of Life Sciences, Ås, Norway (was Agricultural University of Norway) | Candidatus Magistrerii (BSc equivalent) in Economics | Jan 1994 |

*Note:   References provided on request. List of Publications provided on request - and available at www.rygnestad.net*

## Description of Specific Assignments

### Economic and Financial Analyses

As part of the development project team, I designed an Excel-based model for analysing the expected economic and financial returns to an agricultural and rural development project in Africa. The project had a budget of USD 85 million and focused on increasing agricultural productivity on project area marshlands and hillsides through irrigation, terracing, and commodity chain development. To obtain the necessary information, I worked closely with planning and implementation staff who had access to relevant analysis data for the project area. I reported to the project team leader. I built a discounted cash flow model to quantify increased value of production and infrastructure investments as well as proxies for capacity building and environmental benefits. The model was built to analyze the project from planning through implementation of different phases to completion. The analysis included using Monte Carlo simulation to quantify the risk associated with model assumptions.

I built an Excel-based model to conduct an economic and financial analysis to support the restructuring of a USD 200 million irrigation development project in Africa. The project investment supports increased productivity in vegetable and grain farming using different irrigation-technologies and -management designs coupled with improved extension services. The discounted cash flow model was designed to analyze multiple scenarios to aid the project team's decision making.

I built an Excel-based model to analyze the economic and financial returns from a USD 54 million development project in Africa. The project supported production and land management initiatives as well as capacity building for producer organizations. I reported to the project team leader and I worked with staff in the local project implementation team to obtain the necessary data to design a discounted cash flow model. Because the project initiatives were community-driven, the ex-ante analysis was based on ten representative sub-project models including livestock, irrigated/non-irrigated crops and vegetables, and agri-business initiatives.

I built an Excel-based model to analyze the economic and financial returns from a USD 9 million emergency food crisis response project in Africa. The project aimed to support adoption of improved agricultural technologies for food production and provide conditional as well as unconditional cash or food to eligible beneficiaries. Due to the nature of an emergency support project, there was no time to estimate the overall project efficiency, but the focus was instead on estimating efficiency or effectiveness of key benefit flows. This included increases in farm gross margins and value of cash and food transfers relative to the country's poverty and food-poverty lines.

As part of a USD 1.2 billion national agricultural development program in Africa, I designed an Excel-based model to analyze the impact of sub-program investments on revenues and costs in 7 different enterprise models including cropping, livestock, and post-harvest enterprises. The quantitative analysis included net present value and rate of return calculations as well as elasticities and identifying risk factors using unit cost comparisons and switching values.

Countries in which I have developed economic and financial models to analyze investment projects: Burundi, Ethiopia Kenya, Malawi, Mozambique, Myanmar, Rwanda, South Sudan, Sudan, Tanzania, Uganda, and Zambia.

*Note: Examples include only assignments related to development projects and exclude my private sector work.*

### Portfolio Reviews

I have conducted numerous portfolio reviews for a major international organization. In these desk studies I analyzed reports on projects and programs to identify elements of good practice and overall trends. The reviews included searching internal project databases, reviewing strategy papers, project appraisal documents, implementation completion reports and other project documents. Interviews were also conducted with key project staff.

Reviewed topics include:
- Agricultural producer organizations
- Sustainable agricultural systems, knowledge, and institutions
- Agricultural innovation systems
- Agribusiness

- Agricultural education and training
- Biotechnology and biosafety
- Gender and rural development
- Land administration and gender issues